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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,660	02/13/2004	Achim Reidelsturz	47092.00076	5637

32294 7590 06/09/2006

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EXAMINER
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HERRERA, DIEGO D

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/777,660	<b>Applicant(s)</b> REIDELSTURZ ET AL.	
	<b>Examiner</b> Diego Herrera	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/13/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 50 & 51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 50 & 51 are drawn to a "computer program" *per se* as recited in the preamble and as such are non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software

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and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

The following is an example of what the examiner recommends the preamble should read as: "A computer useable medium having (program code)|(data structure) means embodied therein for causing (description of claims overall function), the computer readable (program code)|(data structure) means in said article of manufacture comprising." For examination purposes, the examiner will consider claims 50 & 51 as statutory as per the above preamble.

### ***Specification***

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

### ***Claim Objections***

Claim 3 is objected to because of the following informalities: misspelling of the word "said". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 10, 15-16, 19, 20, 22-26, 28-29, 31, 35-36, 38, 41, 44-46, 48-49, & 50-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Fishman et al. (US patent publication 20020103935 A1).

3. Regarding claim 1, Fishman et al. discloses a cellular receiver device for receiving data from a data source (title, abstract, fig. 2 objects: 274, 276, 278, 250), said cellular receiver device comprising:

a. Cellular receiving means for enabling receipt of said data from a cellular network domain (fig. 5a & 5b, paragraphs: [0011]-[0016] & [0050]-[0051], where Fishman discusses cellular receiving means showing receipt capabilities); and

b. Radio broadcast access means for providing conditional access (paragraph [0051], Fishman discusses mobile subscription on a list with specific information to be received by a specific mobile device, hence, providing conditional access) to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel (fig. 2, paragraphs [0011]-[0015], [0024], & [0035]-[0037], Fishman discusses accessing means via radio broadcast transmissions to and by different types of user equipment).

4. Regarding claim 20, Fishman et al. discloses a server device for providing a data service to a mobile device, said server device (fig. 2 element 210, paragraphs [0034], Fishman discusses a server providing information through a gateway to a mobile device) comprising:

a. Gateway means for adding said mobile subscriber identity to said received data (fig. 2 elements 250, 274, 276, 278; paragraphs [0035]-[0041], Fishman discusses gateway means and function for adding mobile subscribers ID to corresponding data and transform), and for putting said received data with said mobile subscriber identity to a data stream to be broadcast via digital radio broadcast channel (fig. 2 element 250, 274, 276, 278; paragraphs [0035]-[0041] & [0050]-[0051], Fishman teaches customization tables for clients and their corresponding information request to be transmitted).

5. Regarding claim 41, Fishman et al. discloses a gateway device for providing a connection between a cellular network and a digital radio broadcast domain (fig. 2, paragraph [0024]), said gateway device being configured to encrypt data received from said cellular network to be forwarded to a mobile device (fig. 2 elements 250, 274, 276, 278, fig. 5a & fig 5b, paragraphs [0024], [0035]-[0041] & [0050]-[0051], Fishman discloses information sent from content server encrypted data sent to mobile device via gateway), and to forward said encrypted data to said digital radio broadcast domain based on a conditional access scheme (fig. 2 elements 250, 274, 276, 278, paragraphs [0024], [0035]-[0041] & [0050]-[0051], Fishman discloses from gateway encryption of data is sent to mobile device).

6. Regarding claim 45, Fishman et al. discloses a system for providing data services to mobile devices via a radio broadcast channel, said system comprising:

- a. A cellular receiver device for receiving data from a data source, said cellular receiving device comprising cellular receiving means for enabling receipt of said data from a cellular network domain (fig. 5a & 5b, paragraphs: [0011]-[0016] & [0050]-[0051], where Fishman discusses cellular receiving means showing receipt capabilities), and radio broadcast access means for providing conditional access to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel (paragraph [0051], Fishman discusses mobile subscription on a list with specific information to be received by a specific mobile device, hence, providing conditional access);
- b. A server device for providing a data service to a mobile device, said server device comprising gateway means for receiving data from an external data source (fig. 2 elements 250, 274, 276, 278; paragraphs [0035]-[0041], Fishman discusses gateway means and function for adding mobile subscribers ID to corresponding data and transform) and for mapping a destination address of received data to a mobile subscriber identity (paragraph [0034]), and adding means for adding said mobile subscriber identity to said received data (gateway), and for putting said received data with said mobile subscriber identity to a data stream to be broadcast via a digital radio broadcast channel (fig. 2 elements 250, 274, 276, 278, paragraphs [0024], [0035]-[0041] & [0050]-[0051], Fishman discloses from gateway encryption of data is sent to mobile device); and

- c. A gateway device for providing a connection between a cellular network and a digital radio broadcast domain (fig. 2), said gateway device being configured to encrypt data received from said cellular network to be forwarded to a mobile device (fig. 2 elements 250, 274, 276, 278; paragraphs [0035]-[0041], Fishman discusses gateway means and function for adding mobile subscribers ID to corresponding data and transform), and to forward said encrypted data to said digital radio broadcast domain based on a conditional access scheme (fig. 2 elements 250, 274, 276, 278, paragraphs [0024], [0035]-[0041] & [0050]-[0051], Fishman discloses from gateway encryption of data is sent to mobile device).
7. Regarding claim 46, Fishman et al. discloses a method of transmitting data to a mobile device, said method comprising the steps of:
  - a. Encrypting data to be forwarded (fig. 5a and fig. 5b, paragraphs [0033] & [0050]-[0051]); and
  - b. Forwarding said data to a digital radio broadcast domain based on a conditional access scheme (paragraph [0015]-[0016], Fishman discusses different variety of mobile dives having access to content through mobile gateway when content is address to multiple mobile clients).
8. Regarding claim 48, Fishman et al. discloses a method of receiving data at a mobile device (paragraph [0013]), said method comprising the step of:
  - a. Providing a conditional access to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel (paragraph [0051], Fishman discusses mobile subscription on a list with specific



information to be received by a specific mobile device, hence, providing conditional access); and

b. Receiving said data (fig. 5a & 5b, paragraphs [0050] & [0051], Fishman discloses protocol to make sure data is received).

9. Regarding claim 50, Fishman et al. discloses a computer program embodied on a computer readable medium, said computer program controlling one of a server device and a gateway device to perform the steps of:

a. Encrypting data to be forwarded (fig. 5a and fig. 5b, paragraphs [0033] & [0050]-[0051]); and

b. Forwarding said data to a digital radio broadcast domain based upon a conditional access scheme (paragraph [0015]-[0016], Fishman discusses different variety of mobile dives having access to content through mobile gateway when content is address to multiple mobile clients).

10. Regarding claim 51, Fishman et al. discloses a computer program embodied on a computer readable medium, said computer program controlling a mobile device to transmit data by performing the steps of:

a. Providing a conditional access to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel (paragraph [0051], Fishman discusses mobile subscription on a list with specific information to be received by a specific mobile device, hence, providing conditional access); and

b. Receiving said data (fig. 5a & 5b, paragraphs [0050] & [0051], Fishman discloses protocol to make sure data is received).

11. Consider claim 2, and as applied to claim 1 above, Fishman et al. discloses wherein said radio broadcast access means comprises at least one of a ciphering function and an access function for realizing said conditional access (paragraph: [0046]-[0049], [0051]; Fishman teaches the encryption of information hence ciphering function, furthermore, having access function set up to allow device to access gateway).

12. Consider claim 3, and as applied to claim 2 above, Fishman et al. discloses wherein said at least one of said ciphering and said access function is based on security parameters (paragraph [0046], Fishman teaches this encryption is done to ensure secure communication hence security parameters).

13. Consider claim 4, and as applied to claim 1 above, Fishman et al. discloses wherein said radio broadcast access means are configured to receive message objects belonging to a predetermined application identification which indicates said data (paragraphs [0048]-[0052]; Fishman teaches that system is recognizes device and send relevant information via transforms).

14. Consider claim 5, and as applied to claim 4 above, Fishman et al. discloses wherein said radio broadcast access means are configured to extract an unencrypted mobile subscriber identity from a received message object and to compare it with a mobile subscriber identity of said radio broadcast access means (paragraph [0040]-[0041]; Fishman teaches subscribers check of ID against list before accessing information from server; paragraph [0051]-[0052]).

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15. Consider claim 6, and as applied to claim 5 above, wherein said radio broadcast access means are configured to extract and decrypt said received message object in response to a comparison result (paragraph [0035]-[0041]).

16. Consider claim 10, and as applied to claim 4 above, Fishman et al. discloses wherein said message object is one of a short message service message and a multimedia message service message (paragraph [0049], Fishman teaches use of SMS and MMS depending on device's request).

17. Consider claim 15, and as applied to claim 12 above, Fishman et al. discloses further comprising register means for storing said obtained security parameters (fig. 3, paragraph [0016], [0040]-[0041]; Fishman teaches storage space available also information for device's security parameters as contained in the list mentioned).

18. Consider claim 16, and as applied to claim 12 above, Fishman et al. discloses wherein said client means are configured to use initial security parameters for authentication during a connection setup (paragraph [0040]-[0041]; Fishman teaches subscribers check of ID against list before accessing information from server).

19. Consider claim 19, and as applied to claim 1 above, Fishman et al. discloses wherein said radio broadcast access means comprise service client means for enabling access to at least one of IP service and email services via said radio broadcast data channel (fig. 2; paragraph [0014]-[0016], [0033]-[0035]).

20. Consider claim 22, and as applied to claim 20 above, Fishman et al. discloses wherein said gateway means is configured to encrypt said received data using security

parameters (paragraph [0040]-[0041]; Fishman teaches subscribers check of ID against list before accessing information from server).

21. Consider claim 24, and as applied to claim 23 above, Fishman et al. discloses wherein said server device is configured to assign a public user address in response to said registration request (paragraph [0040]-[0041]; Fishman teaches subscribers check of ID against list before accessing information from server).

22. Consider claim 25, and as applied to claim 24 above, Fishman et al. discloses wherein said public user address comprises one of an IP address and an email address (paragraph [0035]-[0038]).

23. Consider claim 26, and as applied to claim 24 above, further comprising storing means for storing a table linking an assigned public user address to said assigned mobile subscriber identity (paragraph [0040]-[0041]; Fishman teaches subscribers check of ID against list before accessing information from server).

24. Consider claim 28, and as applied to claim 20 above, Fishman et al. discloses wherein said received data comprise an email content, wherein said adding means is configured to encapsulate said received email content into a radio broadcast packet, and wherein a message identity is added to a header of said radio broadcast packet (paragraphs [0035]-[0038]).

25. Consider claim 29, and as applied to claim 20 above, Fishman et al. discloses wherein said received data comprise an IP packet, wherein said adding means is configured to encapsulate said received IP packet into a radio broadcast packet, and

wherein a message identity is added to a header of said radio broadcast packet (paragraphs [0035]-[0038]).

26. Consider claim 31, and as applied to claim 20 above, Fishman et al. discloses wherein said gateway means are configured to reject said received data, if a predetermined maximum data size is exceeded (paragraph [0039]).

27. Consider claim 35, and as applied to claim 33 above, Fishman et al. discloses wherein said security parameters comprise at least one of a mobile subscriber identity and a ciphering key (paragraph [0040]-[0041]; Fishman teaches subscribers check of ID against list before accessing information from server).

28. Consider claim 36, and as applied to claim 33 above, Fishman et al. discloses further comprising a security database for storing security parameters (fig. 3, paragraph [0016], [0040]-[0041]; Fishman teaches storage space available also information for device's security parameters as contained in the list mentioned).

29. Consider claim 38, and as applied to claim 37 above, Fishman et al. discloses wherein authentication for connection setup to said security server means is based on said initial security parameters (paragraph [0037]-[0039], [0046]-[0048]).

30. Consider claim 44, and as applied to claim 43 above, Fishman et al. discloses wherein said gateway device is configured to detect, based on a subscriber database query, whether said mobile device is in the coverage area (paragraph [0040]-[0041]; Fishman teaches subscribers check of ID against list before accessing information from server).

31. Consider claim 49, and as applied to claim 48 above, Fishman et al. discloses wherein said conditional access is provided by at least one of a ciphering function and as access function (paragraph [0040]-[0041]; Fishman teaches subscribers check of ID against list before accessing information from server).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

32. Claims 7-9, 11-14, 17-18, 21, 23, 27, 30, 32-34, 37, & 39-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Fishman et al. (US patent publication 20020103935 A1), and in view of Mulham (EP 1067741 A1).

33. Consider claims 7-9, 11-14, 17-18, 21, 23, 27, 30, 32-34, 37, & 39-40 and as applied to claims 1, 3, 6, & 12 above, Fishman et al. discloses wherein decryption of said received message, however, Fishman et al. does not disclose that wherein decryption of said received message is based on latest valid security parameters allocated to said mobile subscriber identity.

Nevertheless, Mulham teaches wherein decryption of said received message is based on latest valid security parameters allocated to said mobile subscriber identity (paragraphs [0071]-[0088]).

Therefore, it would have been obvious to a person of ordinary skill at the time the invention was made to modify the invention of Fishman et al. to specifically include wherein decryption of said received message is based on latest valid security parameters allocated to said mobile subscriber identity as taught by Mulham for the purposes of being more secure.

34. Claims 42-43, & 47 rejected under 35 U.S.C. 103(a) as being unpatentable over Fishman et al. (US patent publication 20020103935 A1), and in view of Risto (EP 0804012 A2).

35. Consider claims 42-43 & 47, and as applied to claims 41 & 46 above, Fishman et al. does not disclose wherein said conditional access scheme defines a predetermined offline time during which said mobile device has not been in a coverage area of said cellular network, and wherein data forwarding is started after expiry of said offline time.

However, Risto discloses wherein said conditional access scheme defines a predetermined offline time during which said mobile device has not been in a coverage area of said cellular network, and wherein data forwarding is started after expiry of said offline time (col. 6 lines: 31-54, col. 7 line: 31- col. 8 lines: 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Fishman to specifically include wherein said conditional access scheme defines a predetermined offline time during which said mobile device has not been in a coverage area of said cellular network, and wherein data forwarding is started after expiry of said offline time as taught by Risto for the purpose of being more effective.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday-Friday, 6:30AM-3:30PM.

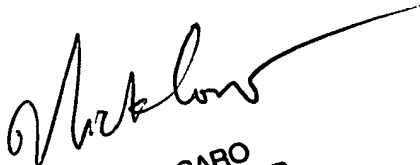
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G. Lester can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.H.



NICK CORSARO  
PRIMARY EXAMINER